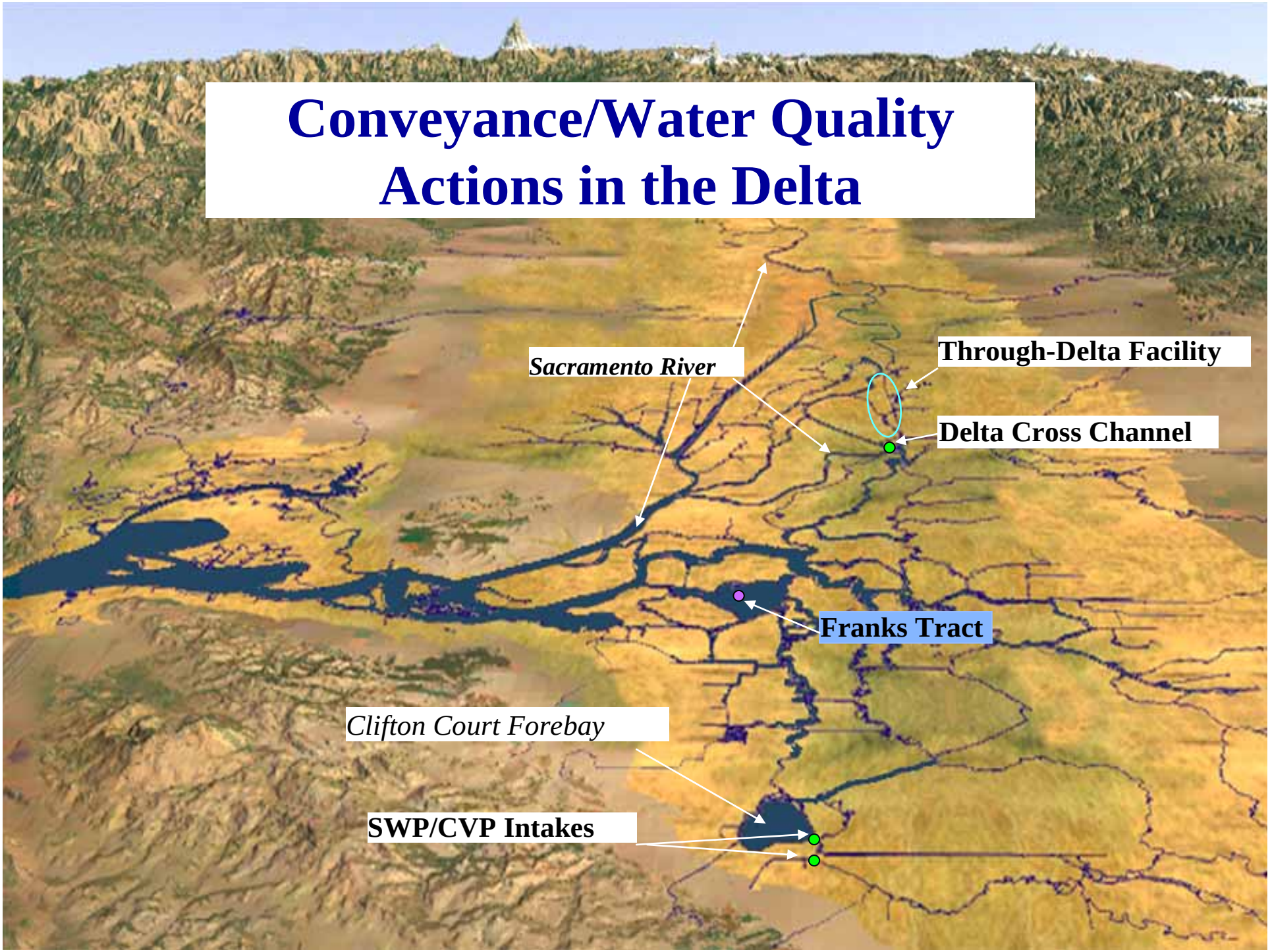
Franks Tract Pilot Project

Ajay Goyal
Department of Water Resources

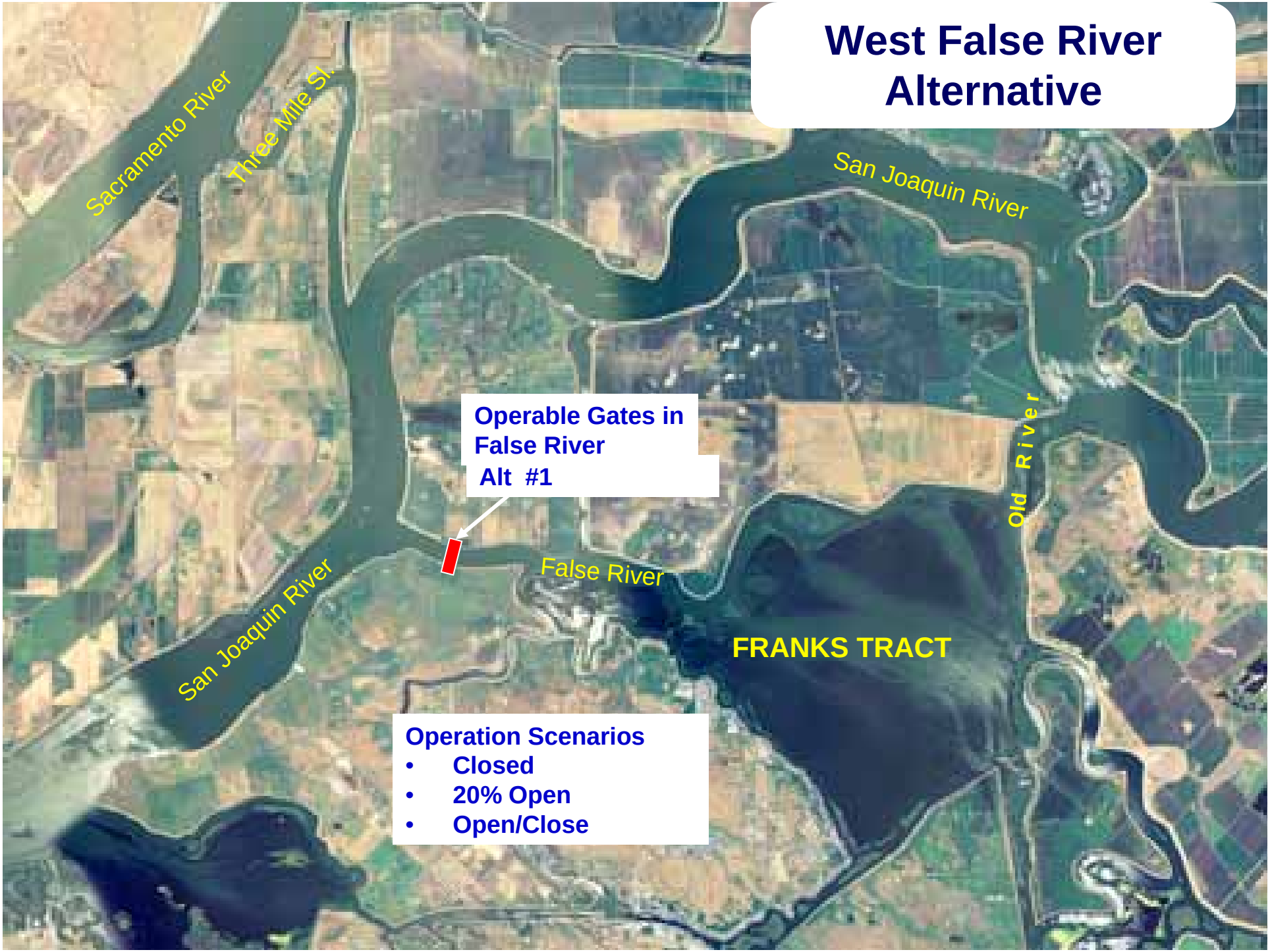
Conveyance/Water Quality Actions in the Delta



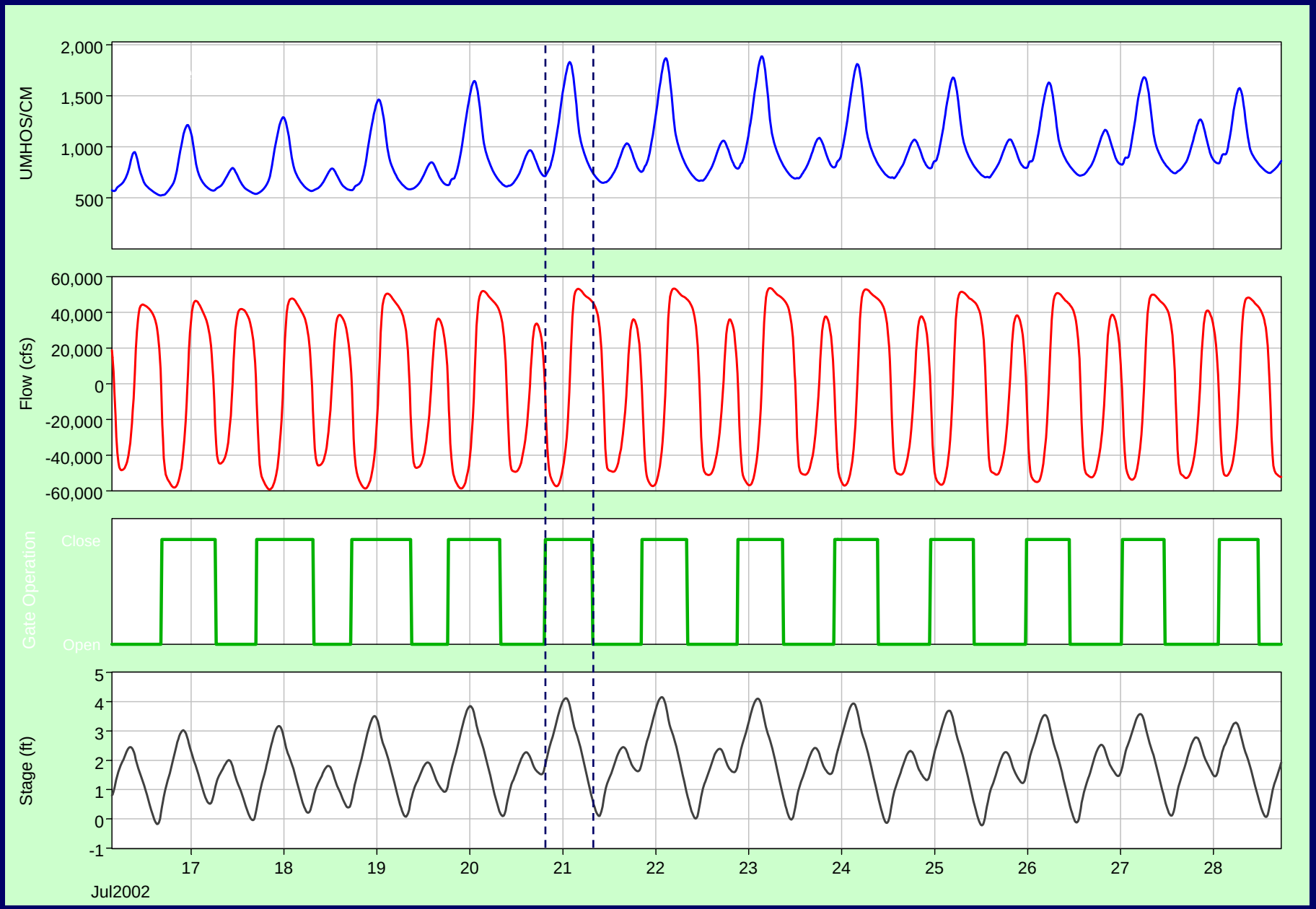
Franks Tract
Pilot Project Objectives

- Confirm water quality benefits
- Monitor impacts of the project
- Modify project operations to improve benefits and minimize impacts


Pilot Project Alternatives
Operable Gates in Three Mile Slough
Alt #4
Sacramento River
Three Mile Sl.
San Joaquin River
Operable Gates in False River
Alt #2
Operable Gates in False River
Alt #1
Old River
False River
San Joaquin River
FRANKS TRACT
Operable Gates in Old River
Alt #3
Operable Gates in Sand Mound Slough
Alt #2
Operable Gates in Holland Cut
Alt #3

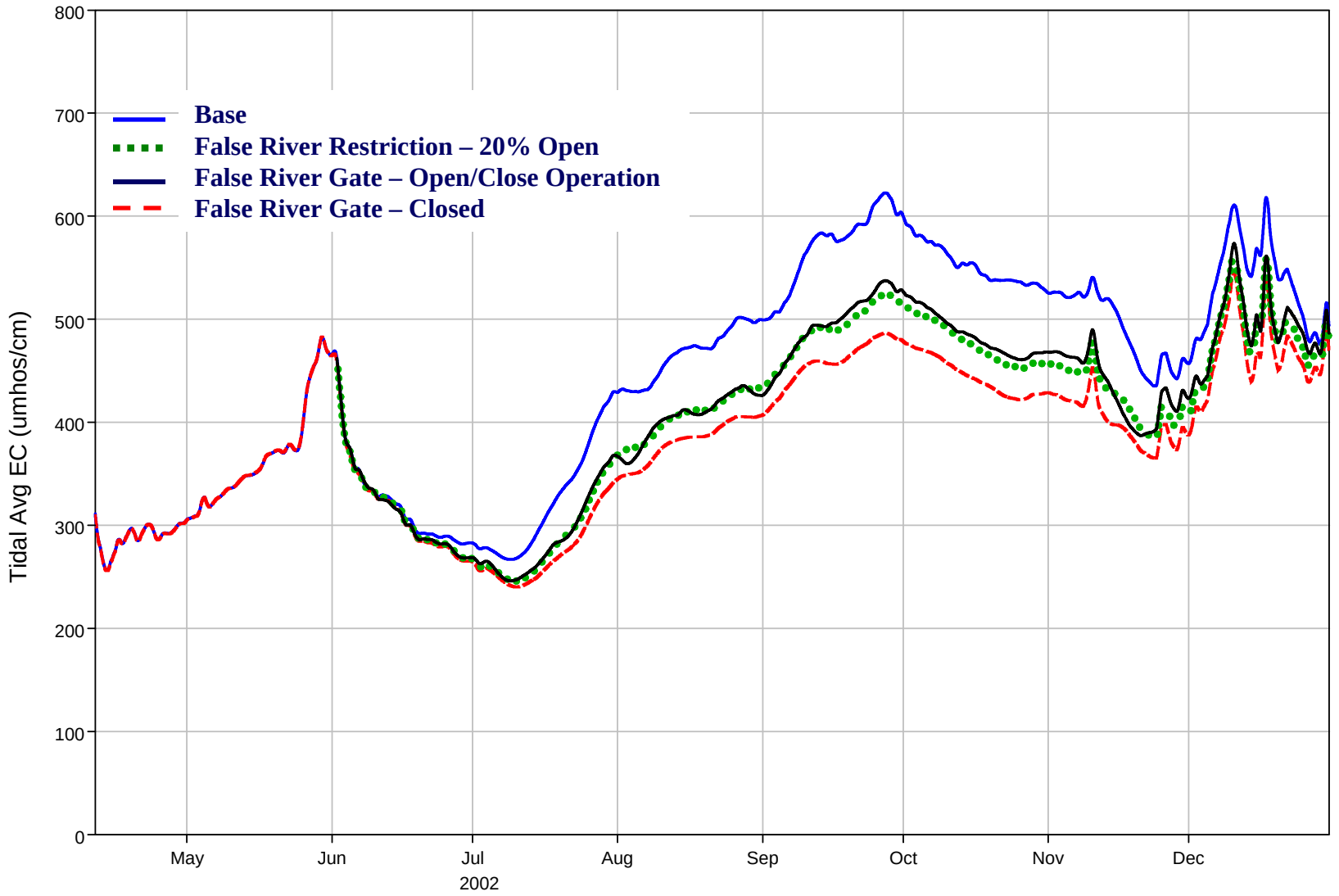

West False River Alternative
Sacramento River
Three Mile Sl.
San Joaquin River
Operable Gates in False River
Alt #1
Old River
False River
San Joaquin River
FRANKS TRACT
Operation Scenarios
• Closed
• 20% Open
• Open/Close

West False River Gate Closure

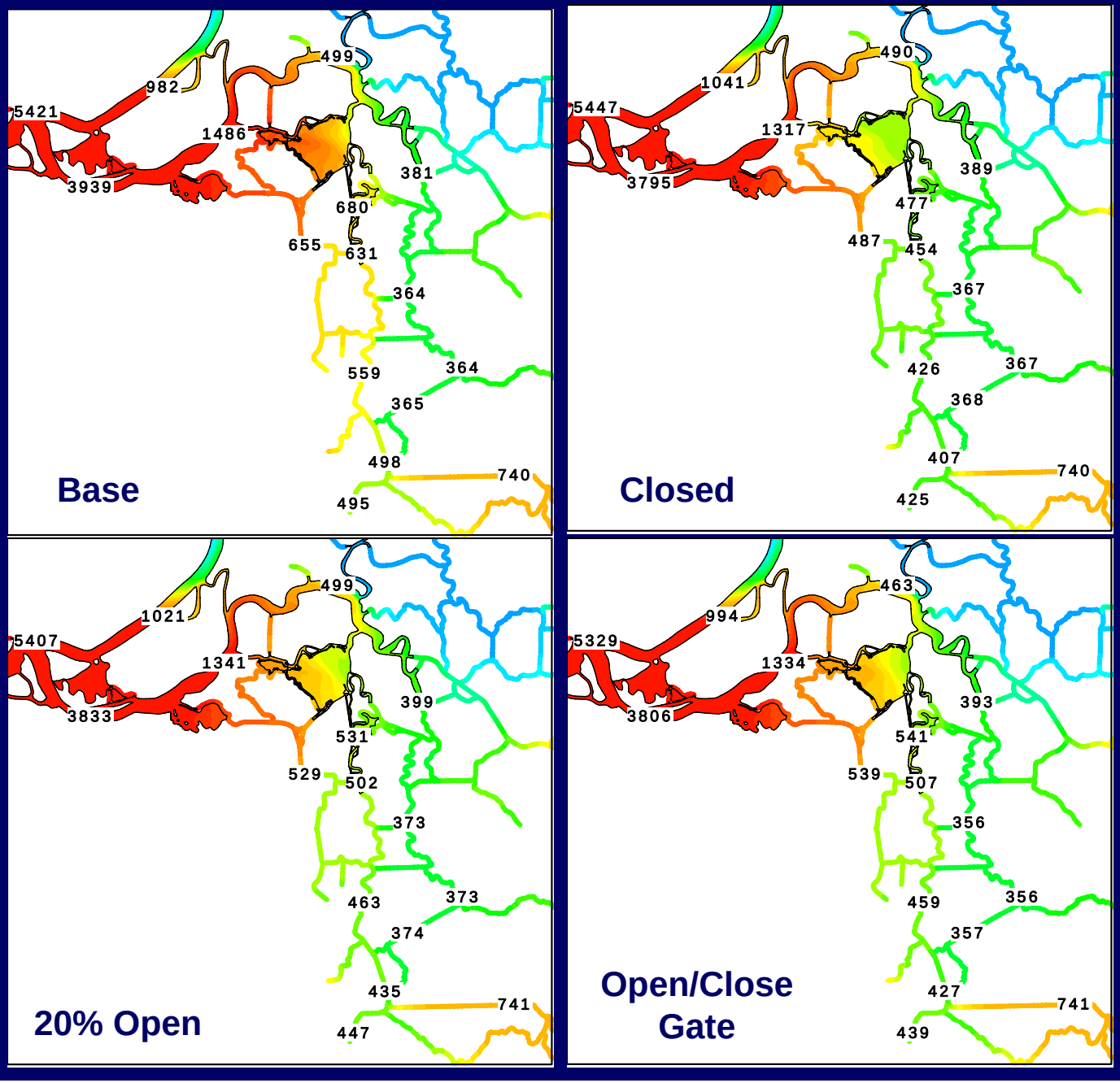


Alt #1: West False River - SWP

2002 (Dry Year) Tidally Averaged EC



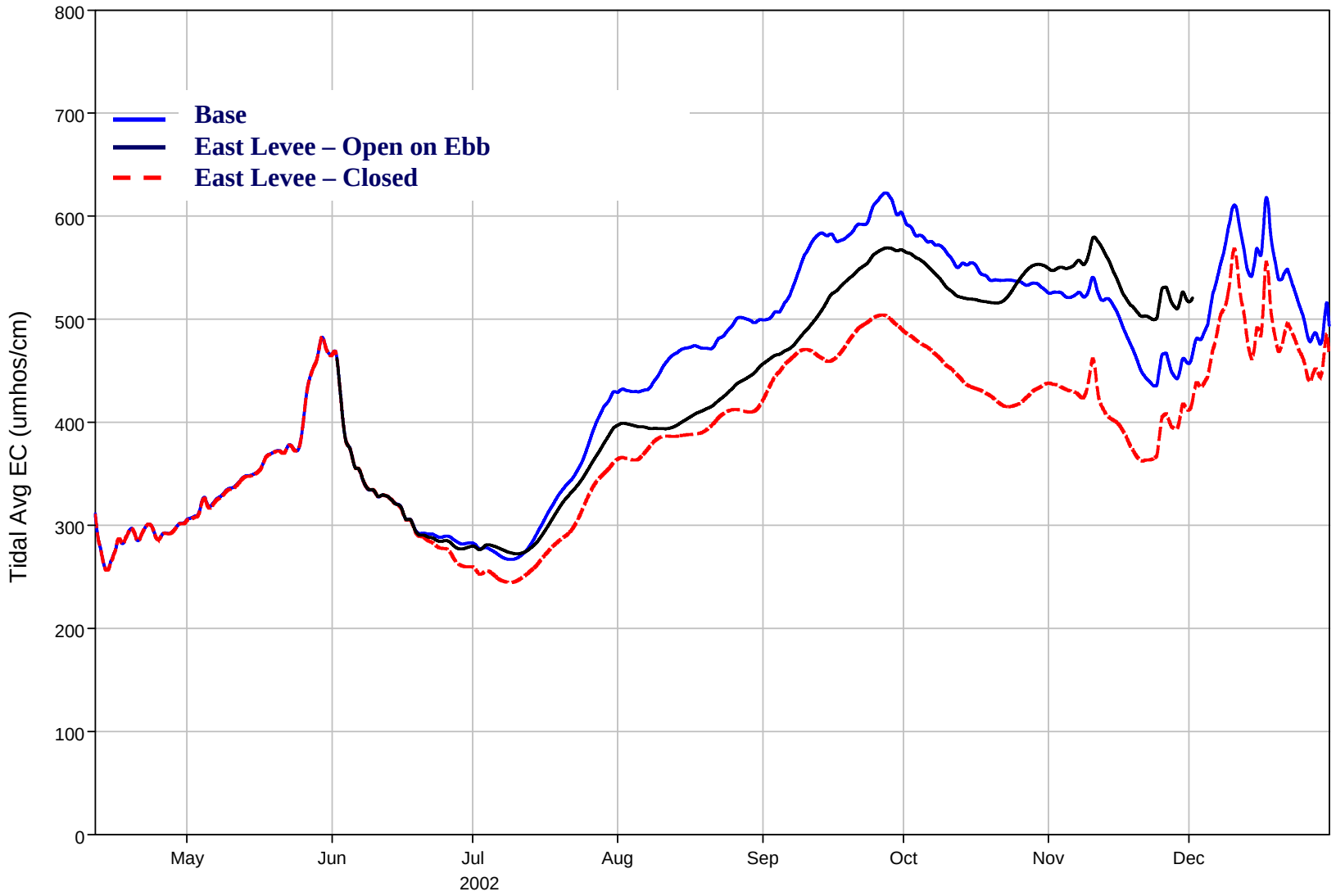
West False River, Tidally Average EC, Sept 1, 2002



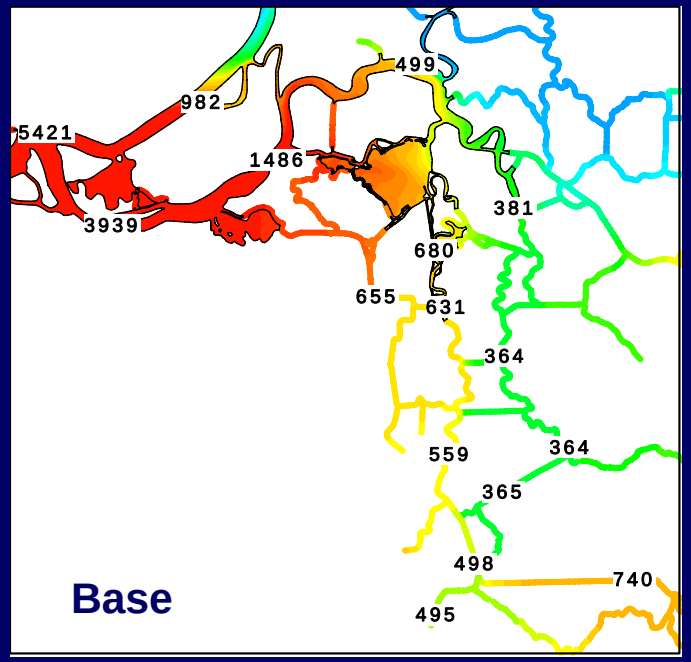

East Levee + 2 Gates Alternative
Sacramento River
Three Mile Sl.
San Joaquin River
Operation Scenarios
1. Closed
2. False River Gate Open on Ebb Tide
Operable Gates in False River
Alt #2
Old River
False River
San Joaquin River
FRANKS TRACT
Operable Gates in Sand Mound Slough
Alt #2

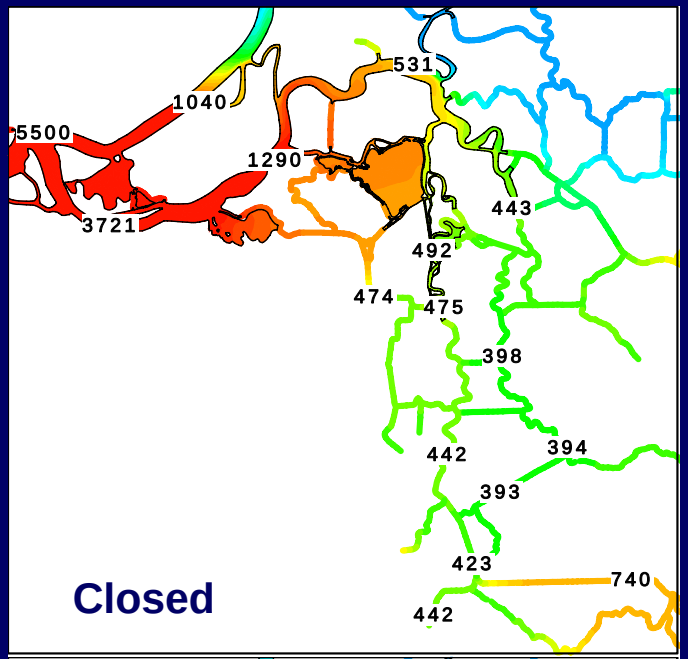
Alt #3: East Levee – SWP

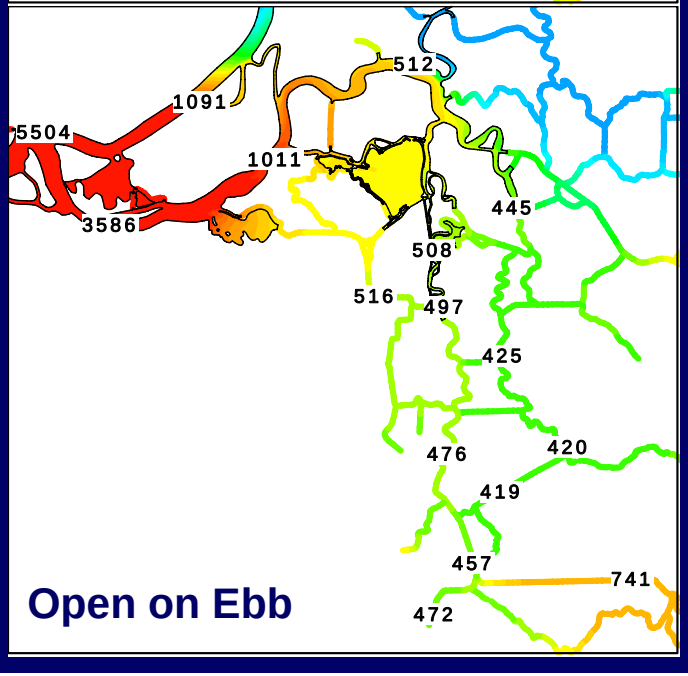
2002 Tidally Averaged EC



East Levee + 2 Gates, Tidally Average EC, Sept 1, 2002



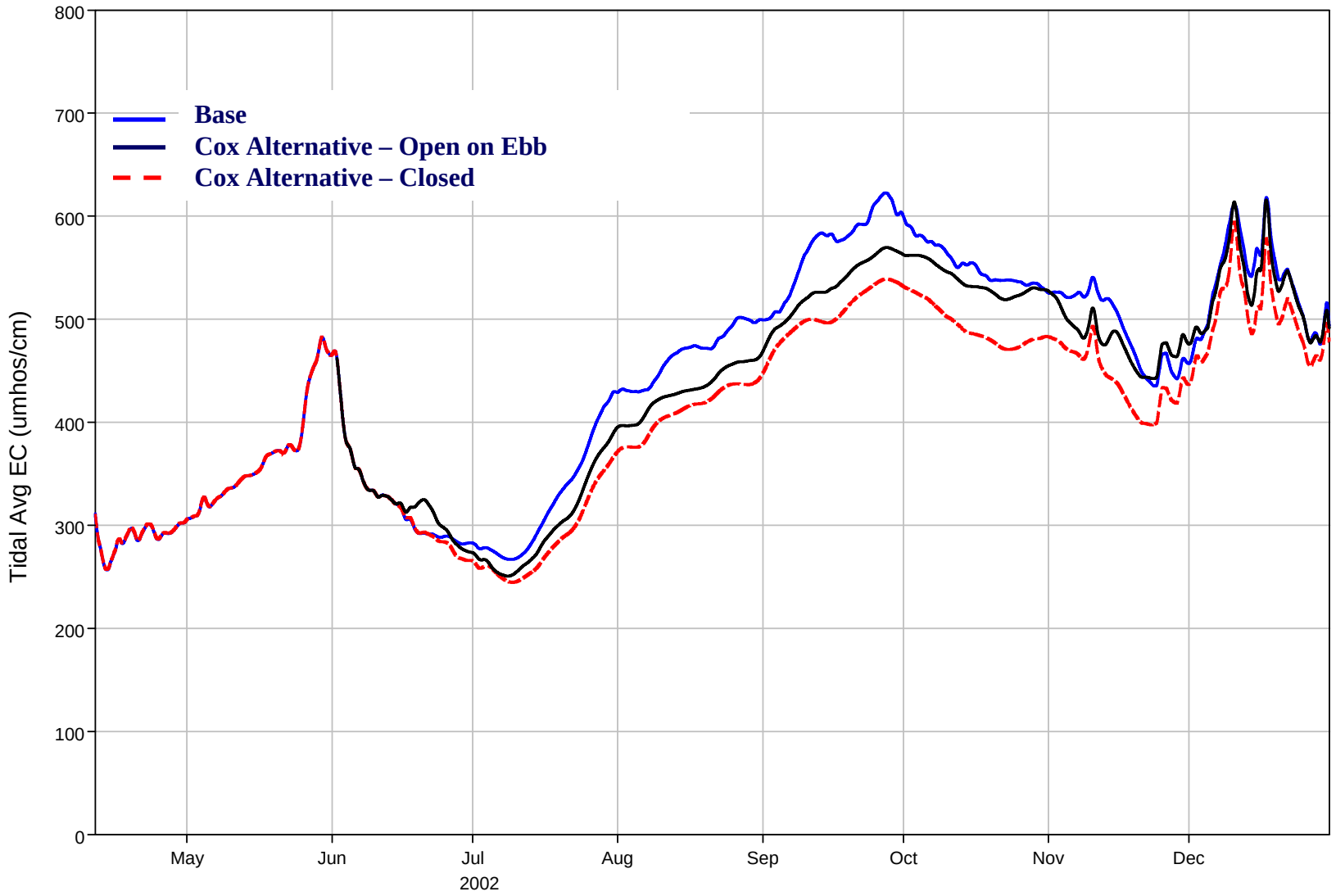




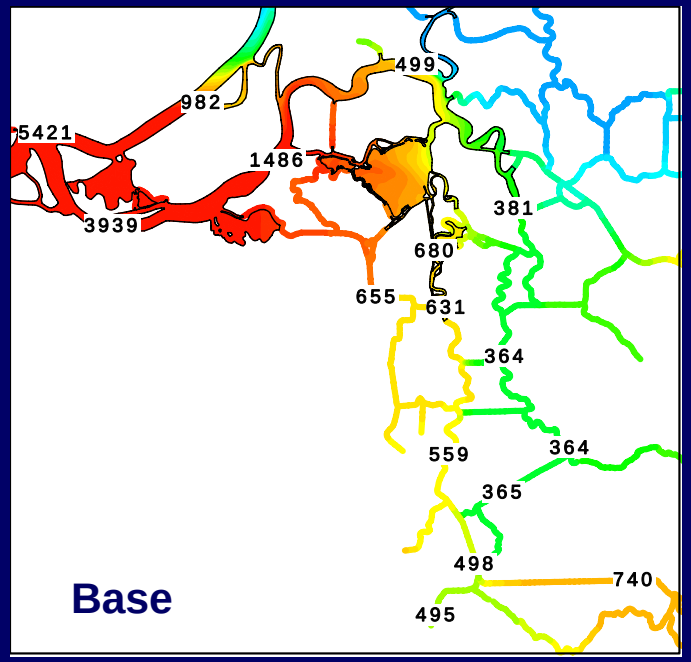

COX: Holland Cut + Old River Gate Alternative
Sacramento River
Three Mile Sl.
Operation Scenario
1. Closed
2. Open Gates on Holland Cut during Ebb Tides
Old River
False River
San Joaquin River
FRANKS TRACT
Operable Gates in Old River
Alt #3
Operable Gates in Holland Cut
Alt #3

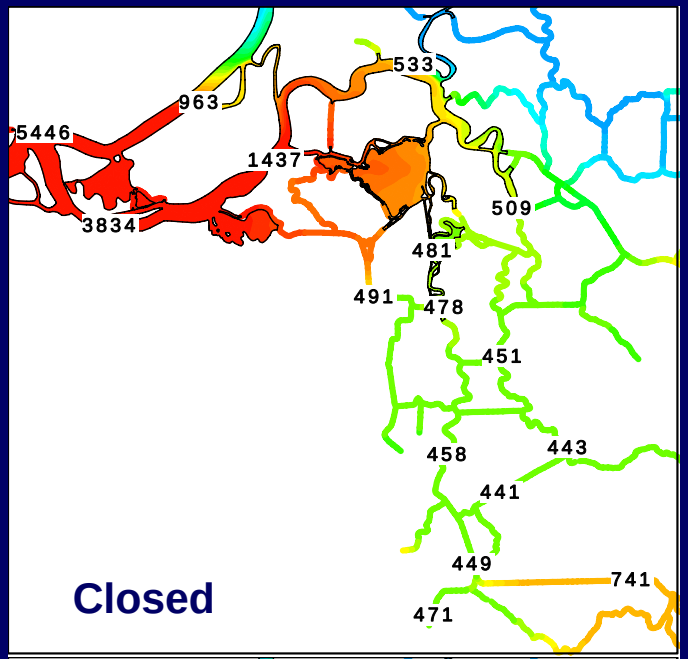
Alt #2: Cox Alternative – SWP

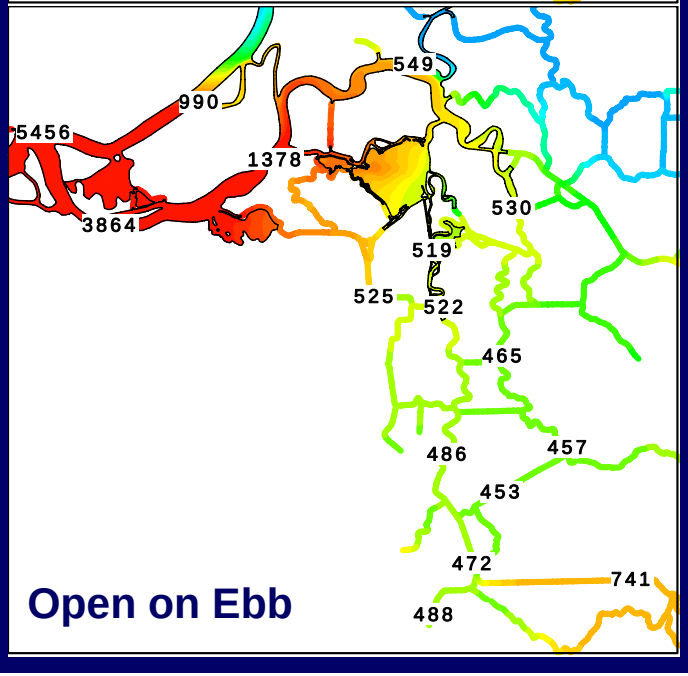
2002 Tidally Averaged EC



COX, Tidally Average EC, Sept 1, 2002

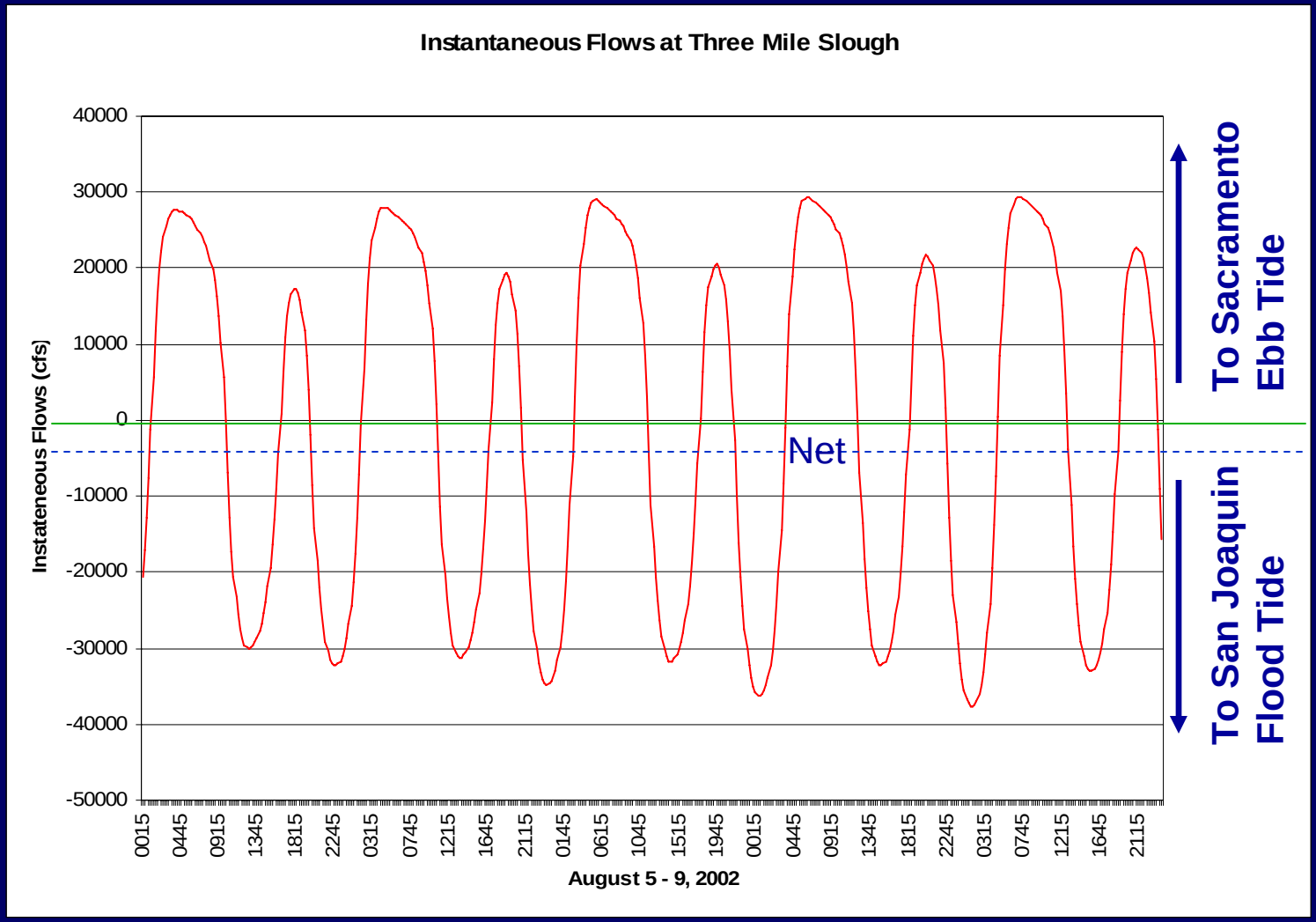




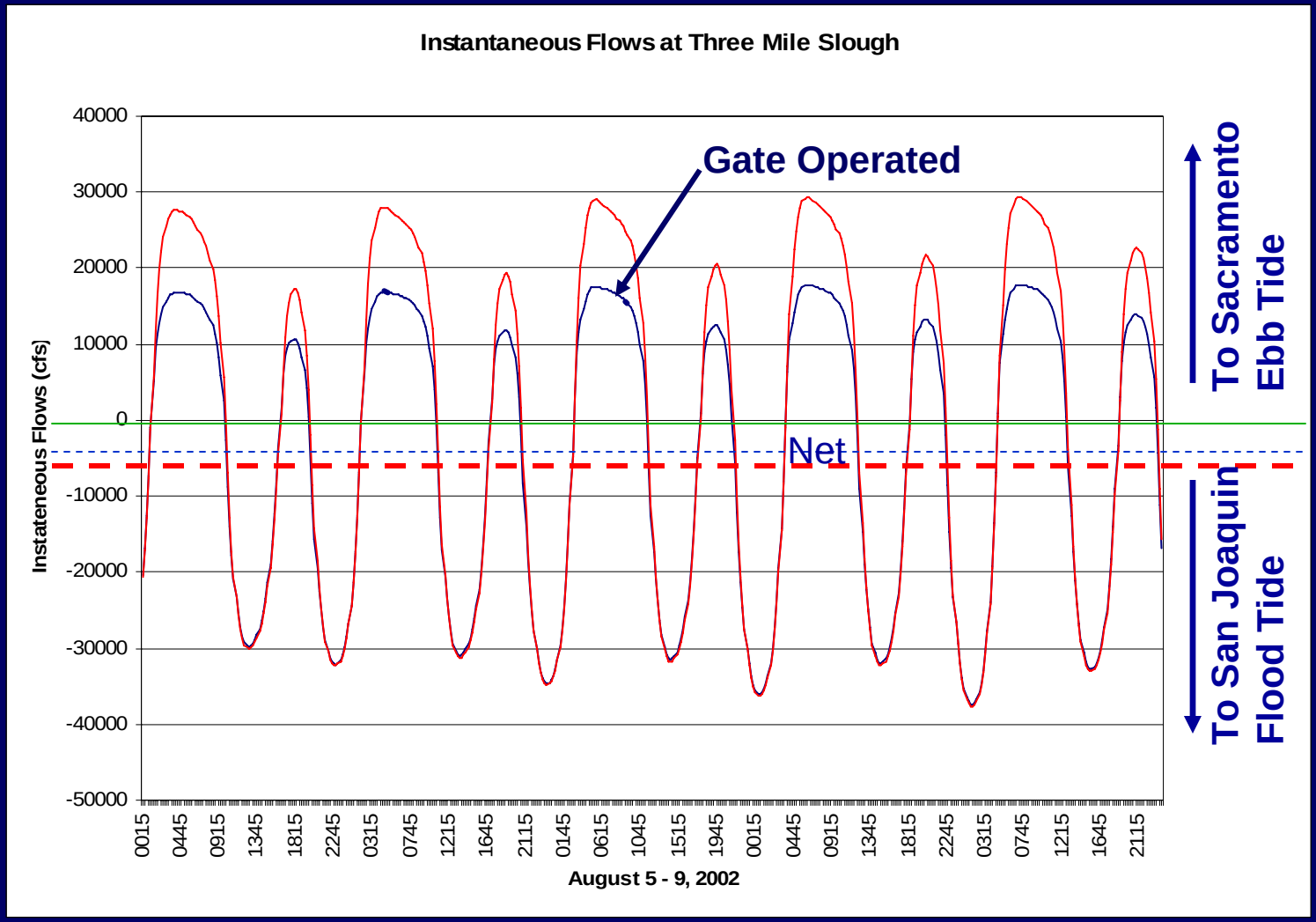



Three Miles Slough Alternative
Sacramento River
Three Mile Sl.
San Joaquin River
Old River
False River
San Joaquin River
FRANKS TRACT

Adaptive Management of 3 Mile Slough
Effect on Instantaneous Flows

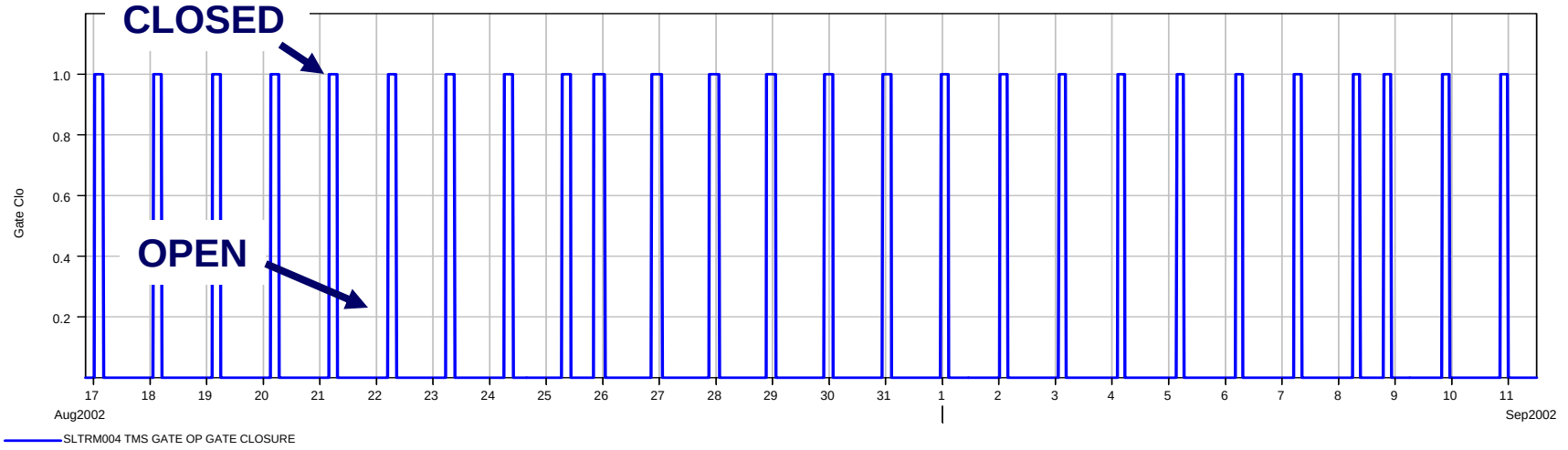


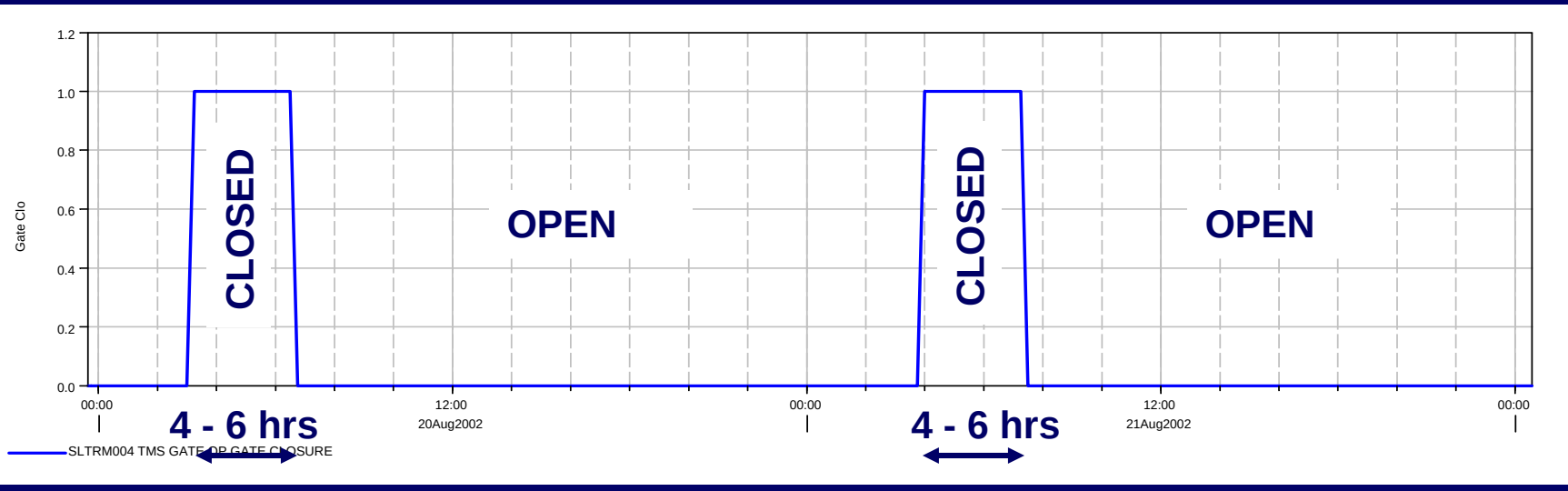
Adaptive Management of 3 Mile Slough
Effect on Instantaneous Flows




Three Miles Slough Alternative
Sacramento River
Three Mile Sl.
Operable Gates in Three Mile Slough
San Joaquin River
Operation:
Close during Portion of Ebb Tide
Old River
False River
San Joaquin River
FRANKS TRACT

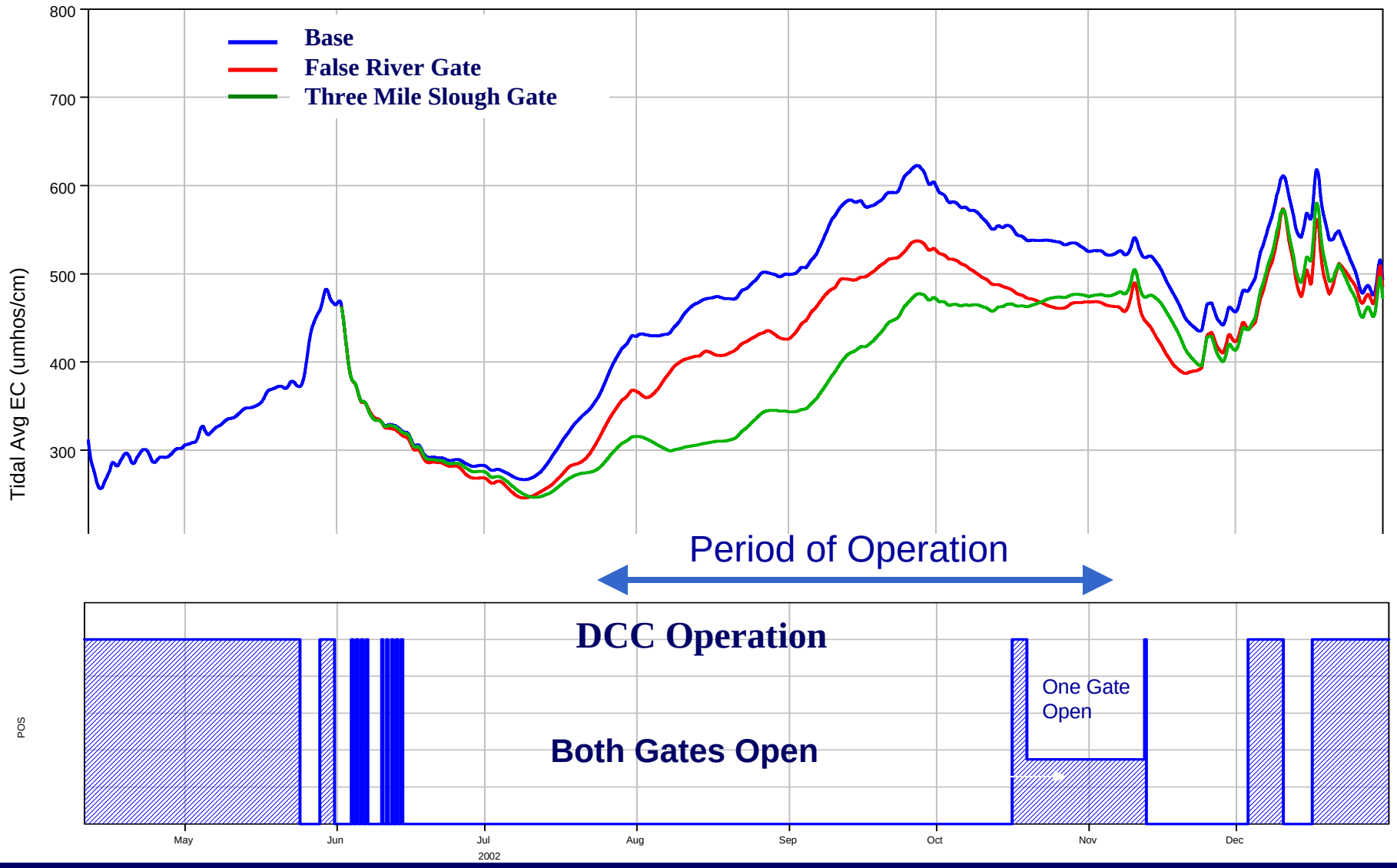
Three Mile Slough Gate Closure



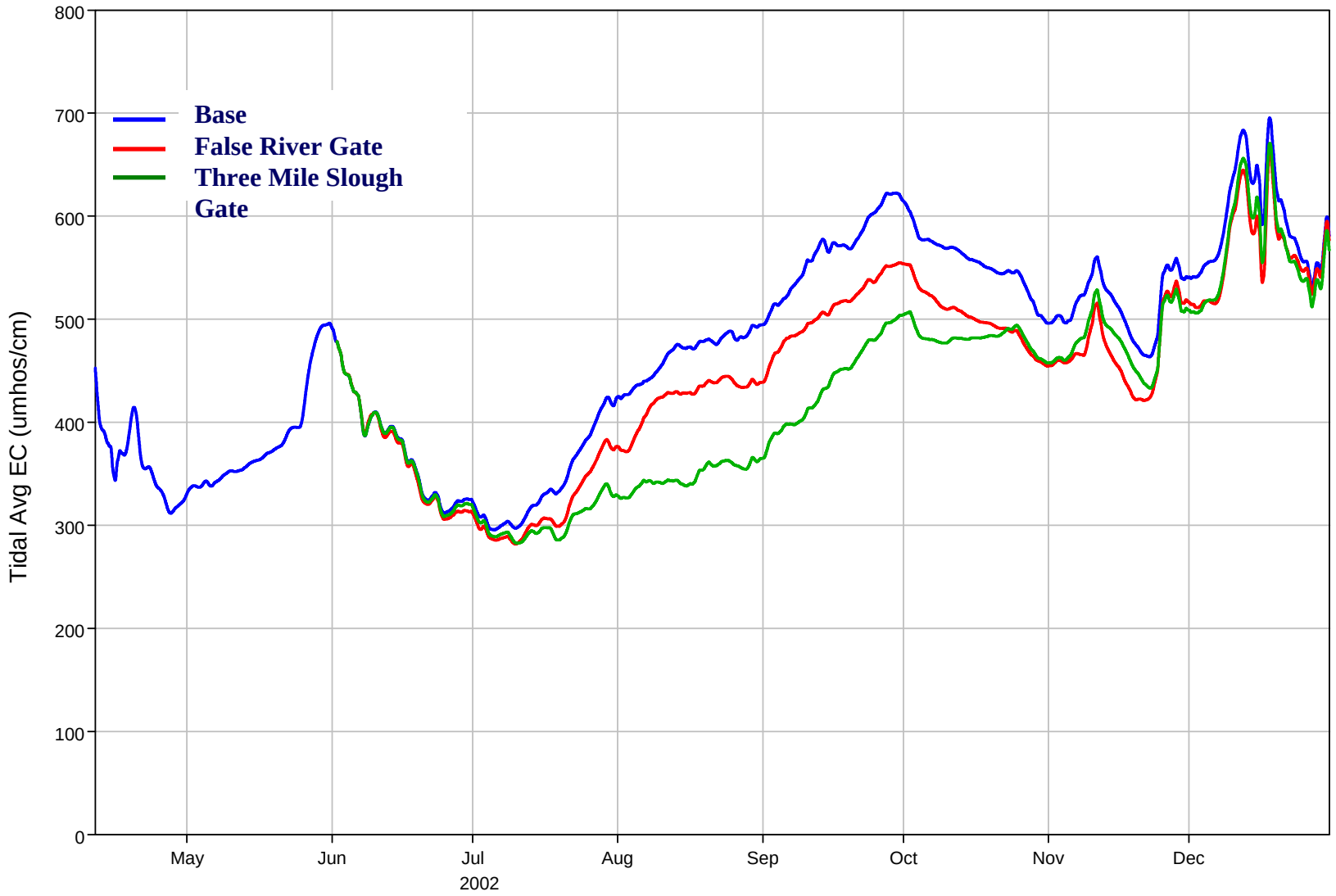


Alt #3: Three Mile Slough – SWP

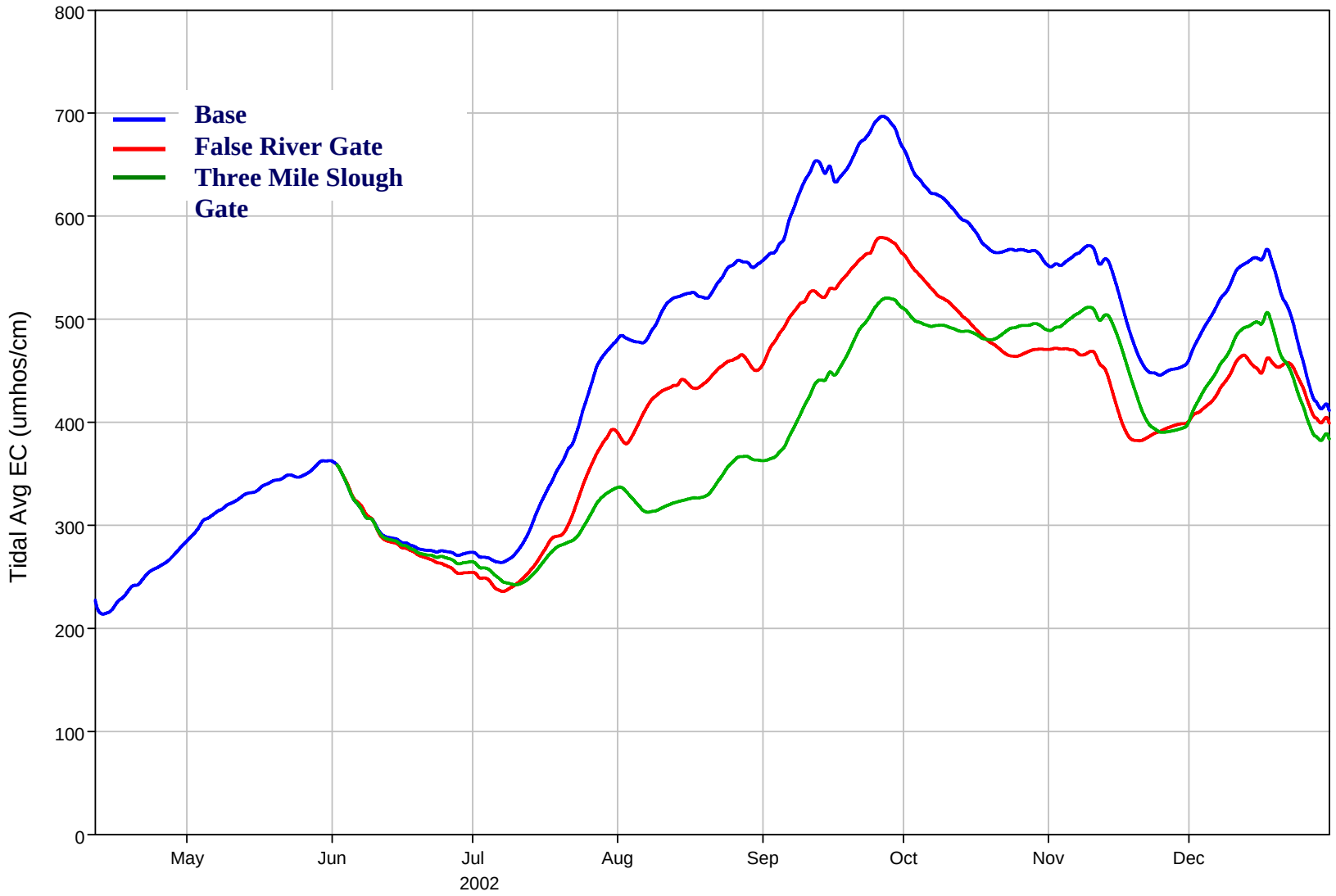
2002 Tidally Averaged EC



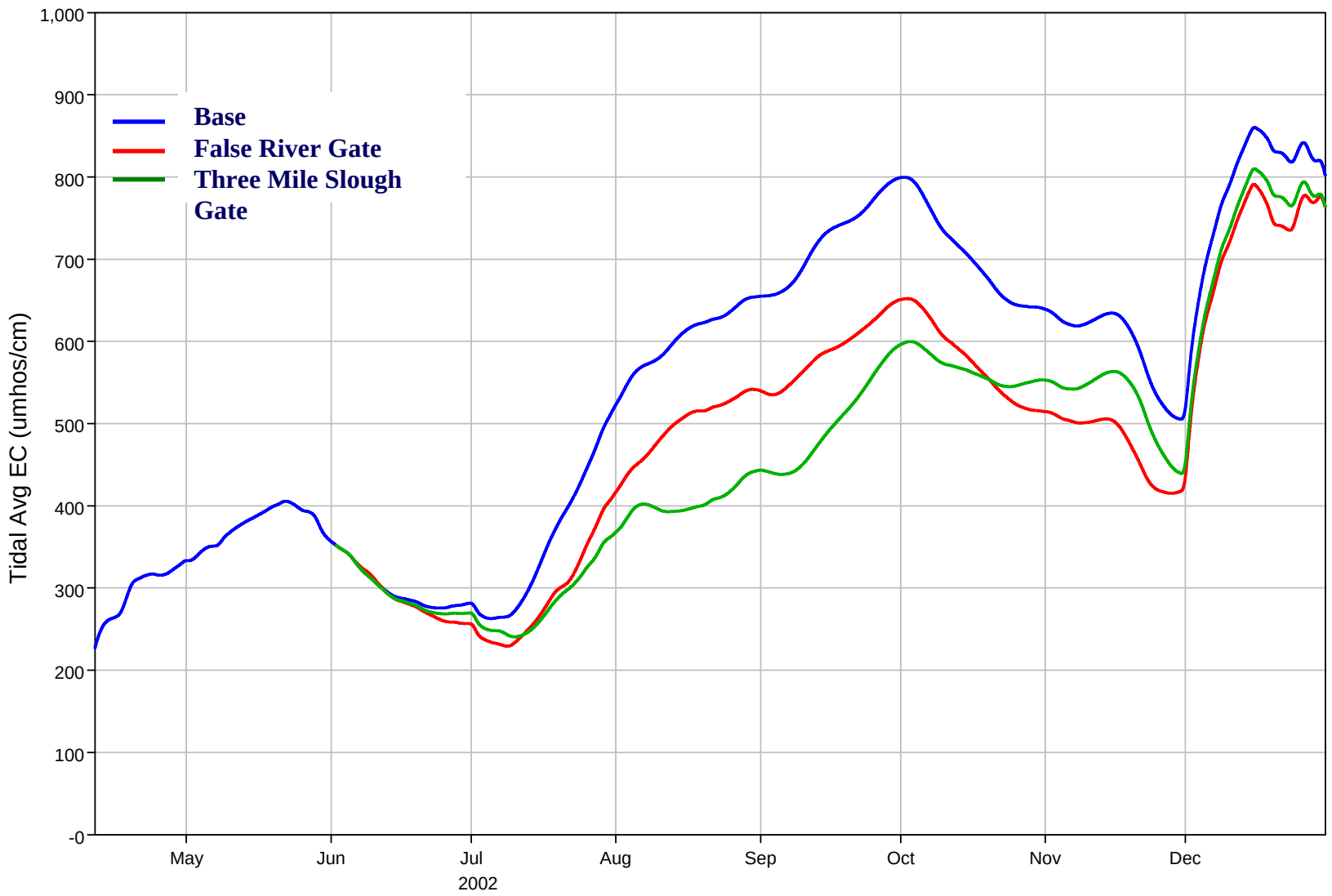
Year 2002 - Tidally Averaged EC
CVP



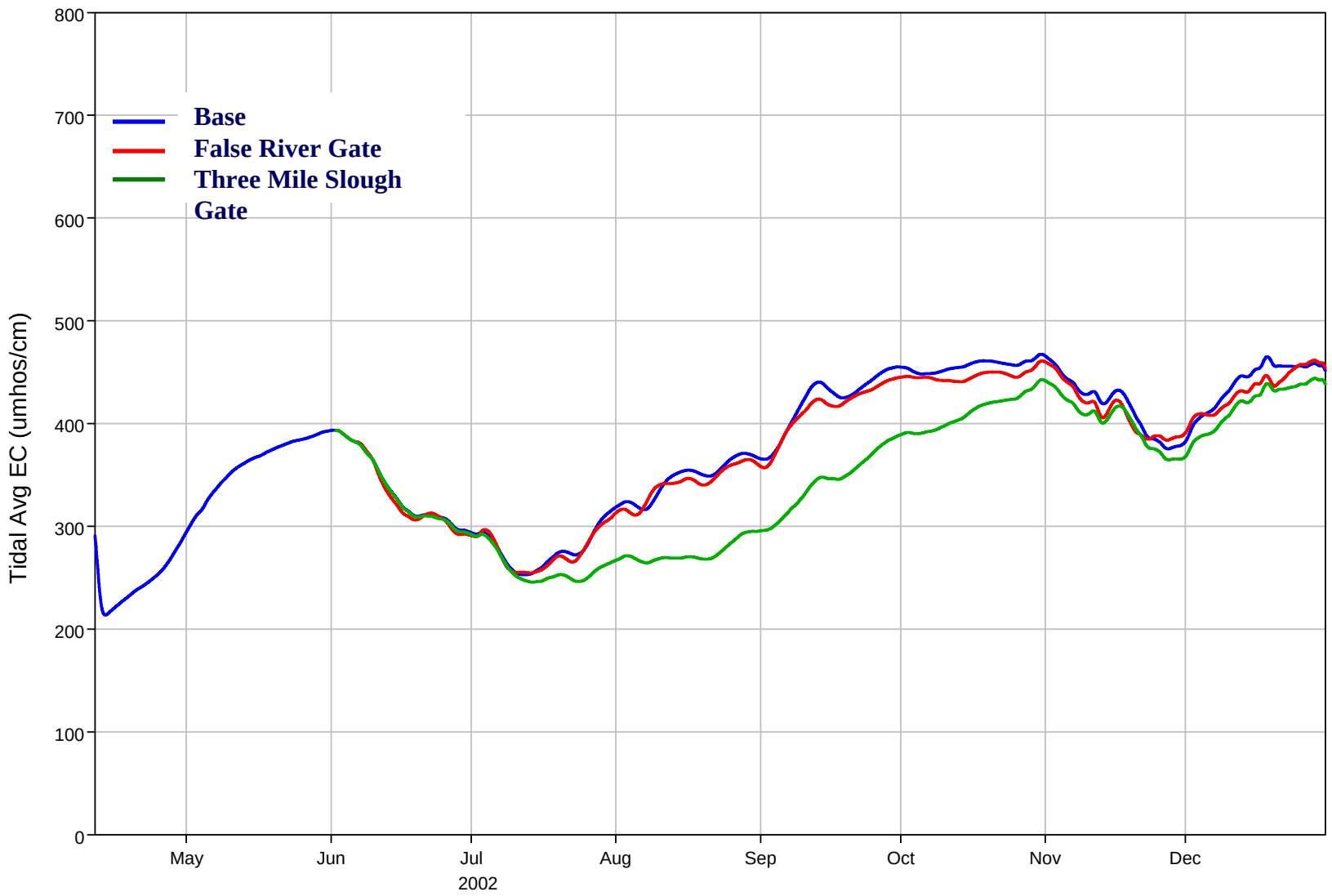
Year 2002 - Tidally Averaged EC
CCWD at Old River



Year 2002 - Tidally Averaged EC
CCWD at Rock Slough



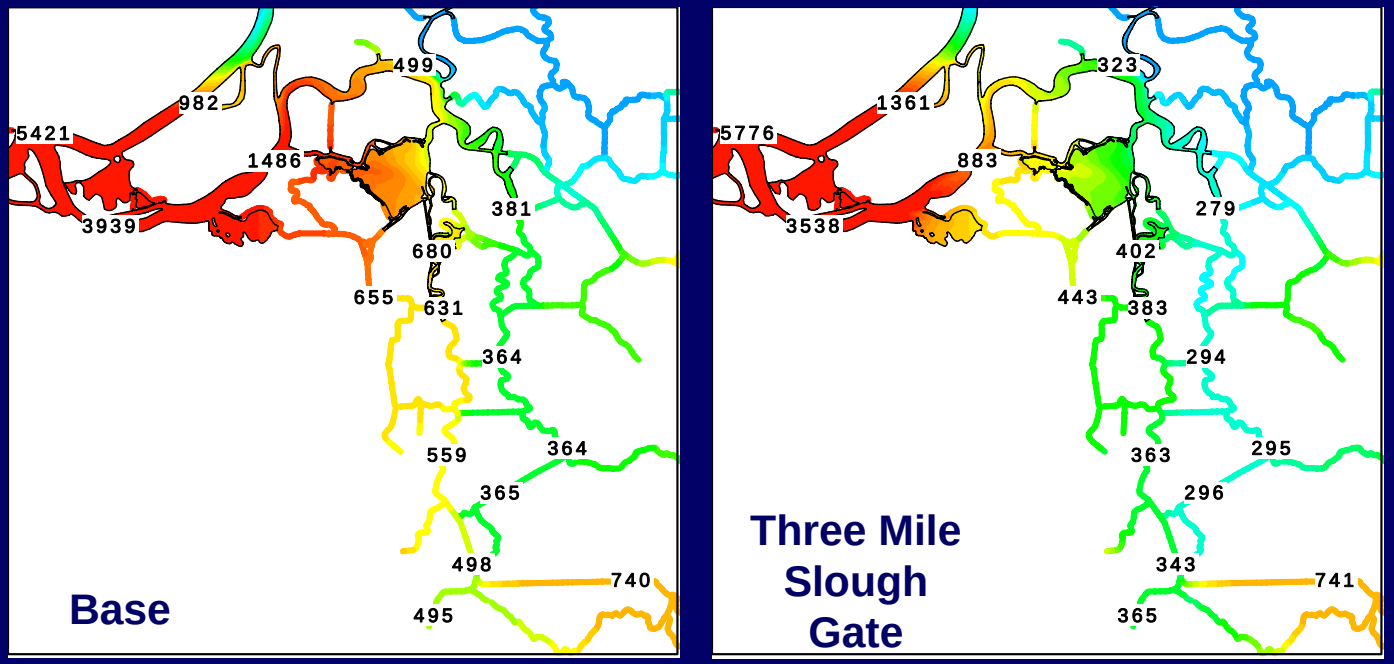
Year 2002 - Tidally Averaged EC
CCWD at Victoria Canal



Three Mile Slough Gate

Tidally Average EC

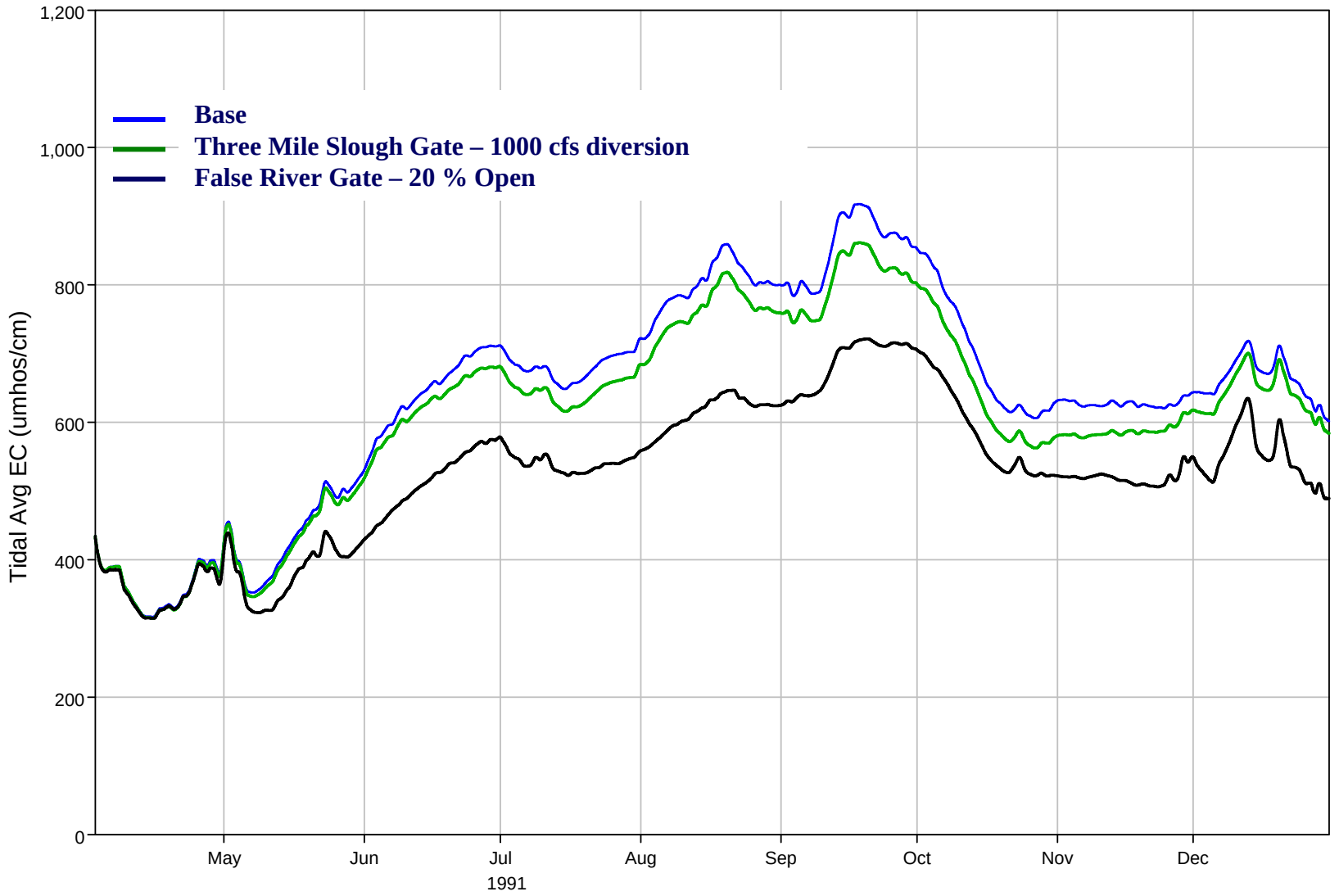
Sept 1, 2002



Three Mile Slough Gate Variable Diversion for 2002 (daily average diversion)

	Net Flow in San Joaquin (cfs)
June	1500
July	3000
August	3000
September 1-20	2500
September 21-30	500
October 1-15	500
October 16-31	1000
November 1-10	1000
November 11-30	2000
December 1-15	2000
December 16-31	0

Year 1991 (Critical)-Tidally Averaged EC, SWP



Franks Tract
Summary of EC Reductions

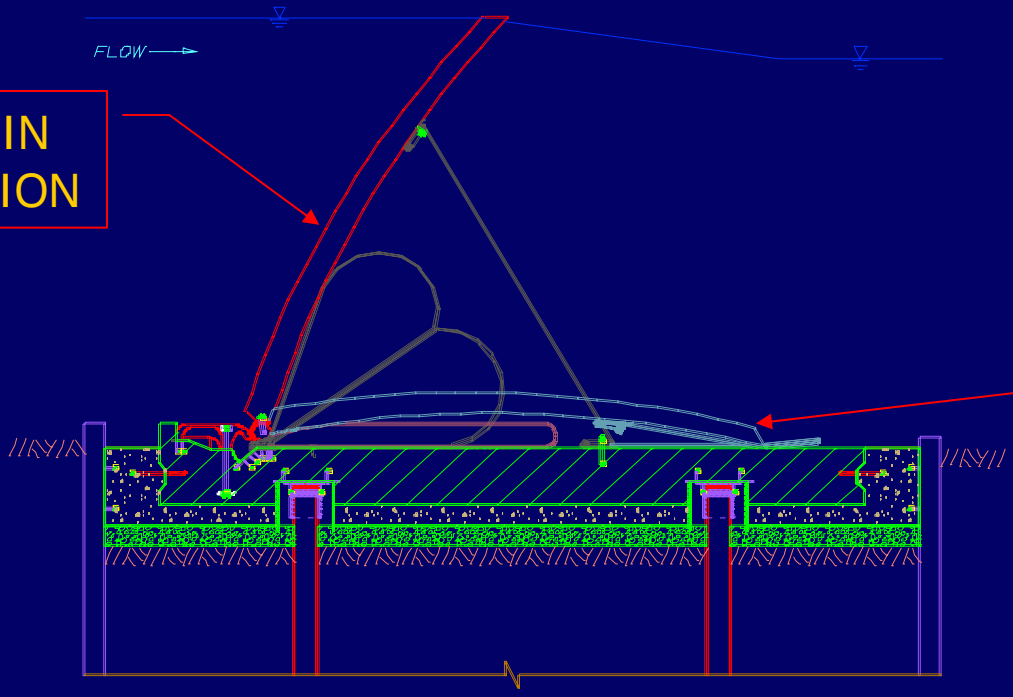
September 2002 (Dry Year)

	SWP	CVP	CCWD Old River	CCWD Rock Slough	CCWD Victoria Canal
West False River	13.3%	10.2%	16.9%	18.9%	2.0%
East Levee	9.1%	5.4%	16.0%	21.2%	-13.6%
Old River/ Holland Cut	6.8%	2.4%	15.7%	19.7%	-22.4%
Three Mile Slough	27.5%	22.5%	30.0%	31.1%	18.6%

Assumes use of operational gates.

Obermeyer Gates

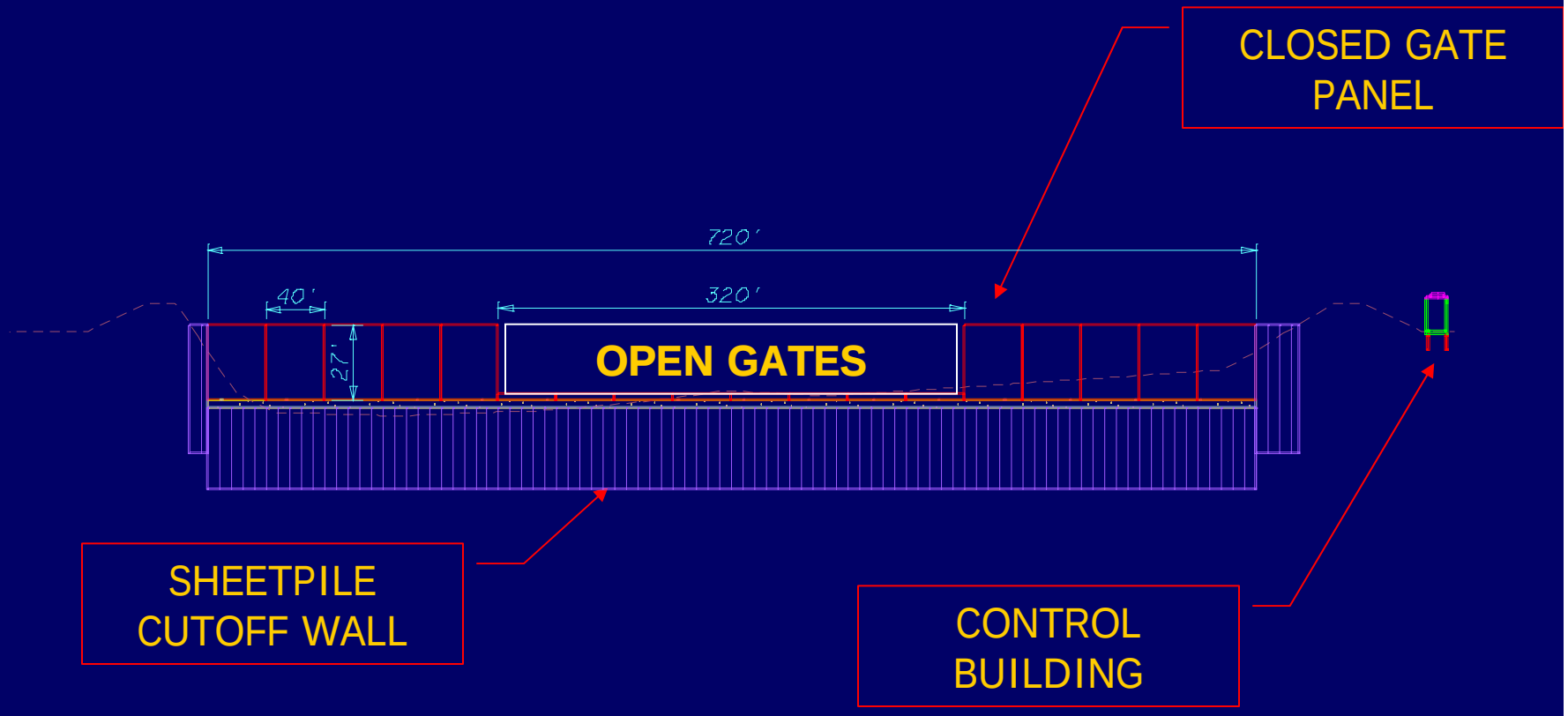
Cross Section



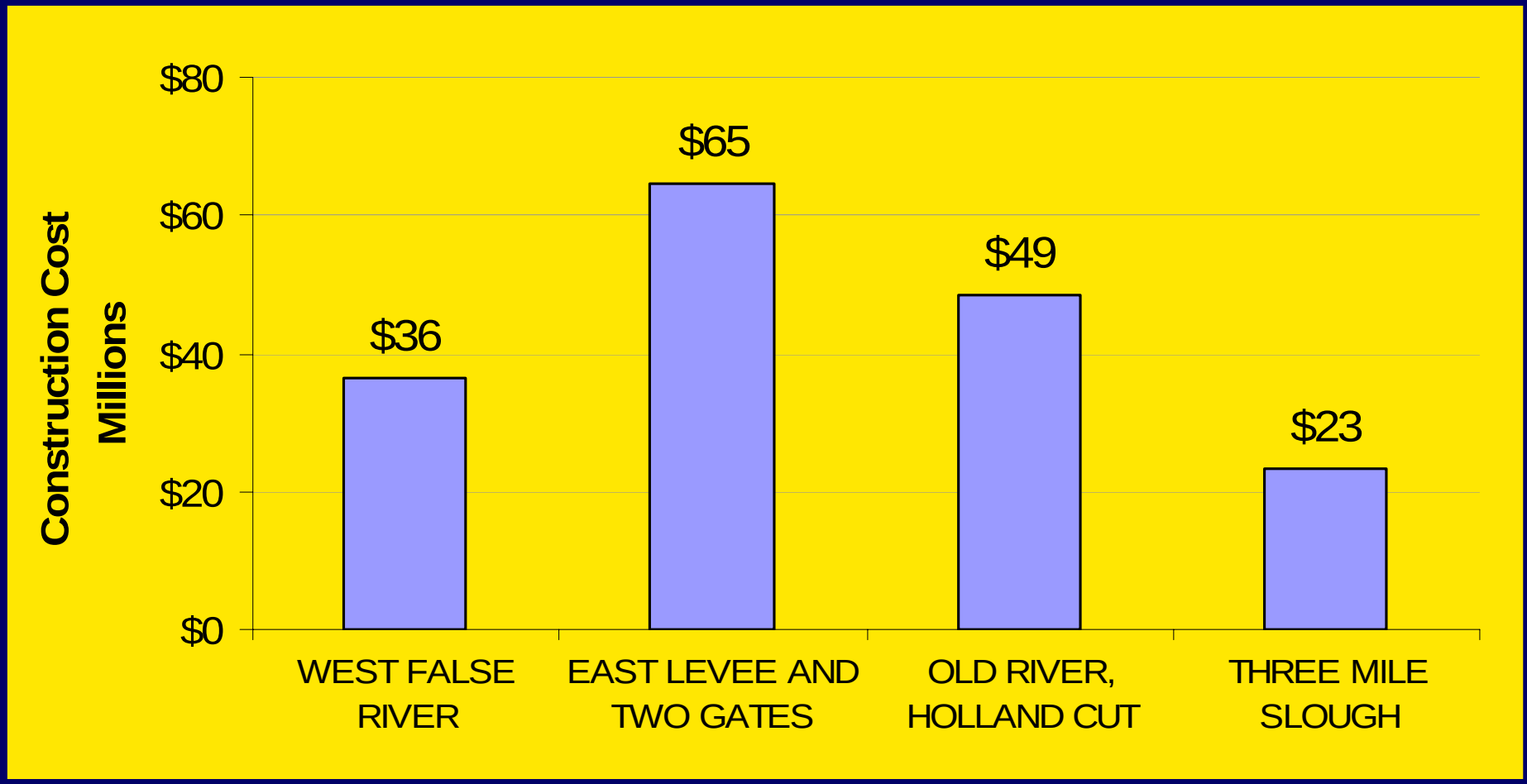
GATE PANEL IN RAISED POSITION

GATE PANEL IN LOWERED POSITION

False River Gated Alternative
Elevation of Gated Structure – Looking D/S



Franks Tract – Pilot Project
Construction Cost - Summary



Assumes use of Obermeyer operational gates.

Franks Tract Pilot Project Budget

(2006 dollars)

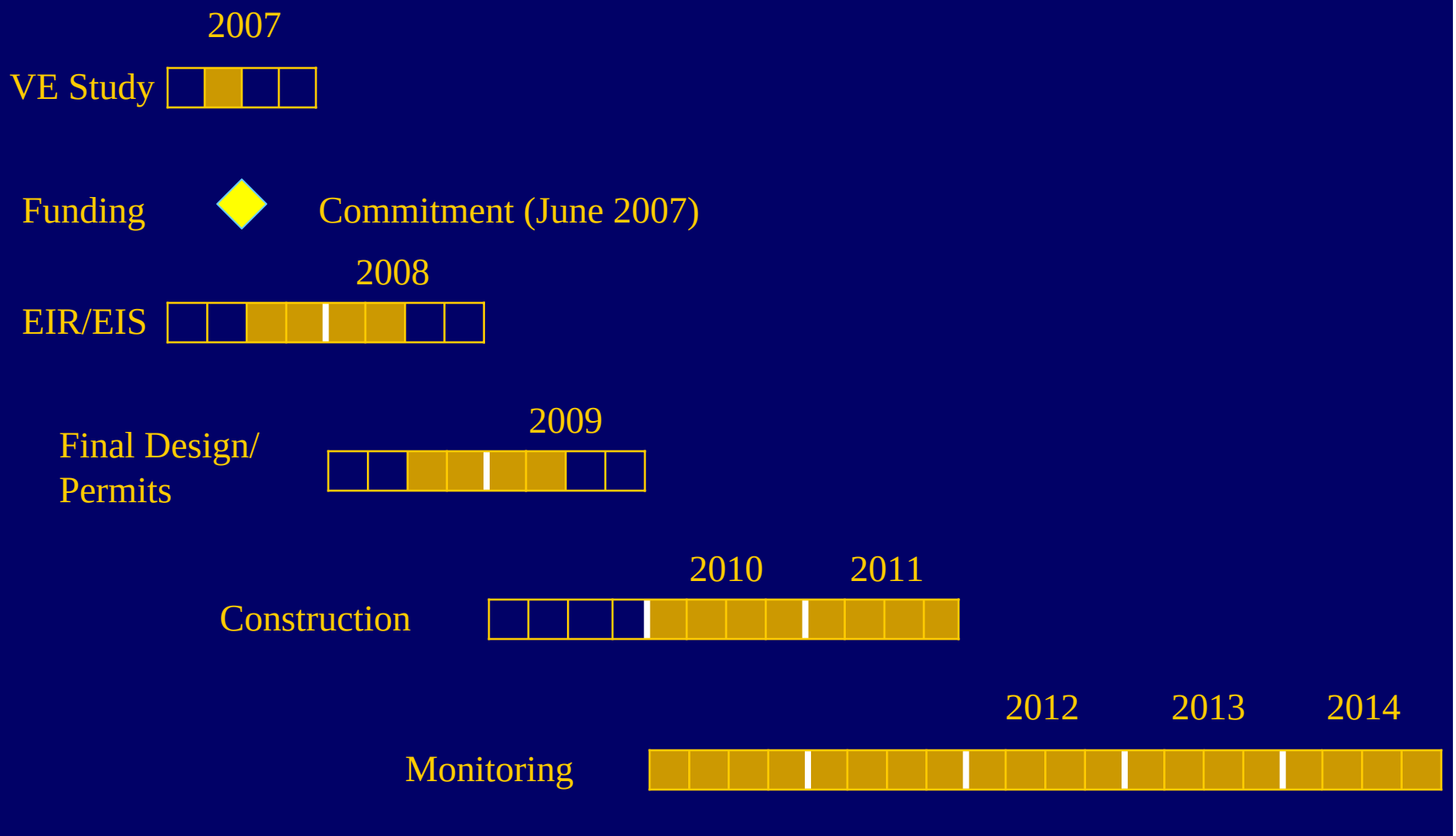
Alternatives Eval. & Value Eng.	$ 1 M
EIR/EIS and Permits	$ 2 M
Monitoring Program (5 years)	$ 5 M
Final Design	$ 3 M
Construction (Least Expensive Alt.)	$ 24 M
Construction Management	$ 3 M
Total	**$ 38 Million**

Assumes use of Obermeyer operational gates.

Franks Tract Project
Funding Options

- Funding Strategy
  - 1/3rd to 1/2 from State funds (bond)
  - 1/4th to 1/3rd from Federal funds (USBR)
  - 1/4th to 1/3rd from water users (SWP, CVP, CCWD)

Franks Tract Pilot Project Schedule



Questions

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